SECTION 3.0 RECOMMENDATIONS

This section describes the management recommendations, for meeting the Bush River watershed goals. This section is organized by the four different subwatershed management types: Sensitive, Rurally Impacted, Impacted, and Impacted Special Resource (see Map 8). Under each management category, broad recommendations, guidance on focusing resources and/or implementation of specific projects or initiatives, and recommendations for future assessments and program development are explained. All the recommendations are based on the assumption of a 10-year planning window. This window should be continually revisited and revised as progress is made. A summary of the recommendations and responsible parties are presented in Table 18.

SECTION 3.1 SENSITIVE

Sensitive subwatersheds have an impervious cover of 0 to 10 percent. Consequently, streams in these subwatersheds are of high quality, and are typified by stable channels, excellent habitat structure, good to excellent water quality, and diverse communities of both fish and aquatic insects (CWP, 1998). The main goal for these types of subwatersheds is to maintain predevelopment stream biodiversity and channel stability.

Broad Recommendations

Preserve 75% of contiguous forest

Cumulatively, more than 1800 acres of contiguous forest in the Sensitive subwatersheds have been identified (see Map 10). The Department of Planning and Zoning (DPZ) should work with Harford Land Trust to preserve land through land acquisition, purchase of development rights and easements and continued landowner stewardship in contiguous forest areas. In areas where land acquisition, conservation easements or other land conservation techniques may not be feasible, encourage the use of conventional development with open space (COS) in the urban residential districts and conservation development standards (CDS) in the agricultural and rural districts to preserve valuable forest and stream resources.

Enhance Existing Riparian Buffers by 40%

Enhancing the current riparian buffers will improve riparian habitat, protect stream banks, and remove nonpoint source pollutants. Over 80 stream miles in sensitive subwatersheds exhibit impacted riparian buffers. Inadequately buffered areas that are not covered by existing programs should be targeted by the county with a supplemental program that would help to establish buffers on residential lands. Forest Conservation Act fee-in-lieu funds could be targeted solely for stream buffer areas, rather than upland areas, in order to increase water quality benefits on areas that do not qualify for the Conservation Reserve Enhancement Program[1] (CREP). Additional funds based on the level of interest from the small farm community (below CREP thresholds) and the non-agricultural community could be allocated to increase implementation of buffers in the Bush River watershed. Lower residential densities usually indicate single large landowners, making this recommendation fairly easy to implement in these areas.

[1] CREP is intended to help farmers restore riparian buffers through rental and cost share payments.

Focusing Resources/Specific Projects

Focus Resources on Priority Sensitive Subwatershed: Grays Run

Grays Run (subwatershed CC-2) was ranked as having some of the most environmentally sensitive and valuable features within the Bush River Watershed (See Appendix F and Map 14). In addition to existing sources of data, CWP's field work rated Grays Run physical in-stream habitat as "excellent" to "good." With the exception of some areas of selective logging, Grays Run also has large expanses of contiguous forest. Grays Run is currently 4% impervious and is likely to become Impacted in the future (projected future IC of 12.5%). Focusing stream enhancement and contiguous forest preservation resources in Grays Run should be a priority for the County. The DPZ should also utilize programs such as the purchase of development rights (PDRs) and transfer of development rights (TDRs) to keep Grays Run under 10% impervious cover.

Areas for Future Assessment and Program Development

Field Verify and Prioritize Contiguous Forest Areas for Preservation

With the exception of the contiguous forest areas in Grays Run, CWP did not have the opportunity to field verify the value and contiguousness of the other contiguous forest tracts highlighted in Map 10. The forest tracts highlighted in Map 10 were selected based on GIS mapping, size (greater than 100 acres) and roundness. DPZ should field verify the contiguousness of the forests and assign each a value utilizing the form and methodology found in Appendix C. This value should be used to prioritize the areas for preservation. Depending on field verification, consider assigning the tract in East Branch a higher priority due to its Sensitive classification; the contiguous forest tract will also provide protection for good quality streams.

SECTION 3.2 RURALLY IMPACTED

Rurally Impacted subwatersheds have an impervious cover of 0 to 10 percent but may be degraded due to livestock access, and grazing and cropping practices that may have severely altered the riparian zone and created isolated stream bank erosion. Once the riparian management improves, however, these streams are often expected to recover (CWP, 1998).

Broad Recommendations

Preserve 50% of farmland

In Little East Bynum (BC-6) and West Branch (OP-6) alone, there are more than 4000 acres of cropland and pasture (See Map 15 and 16). The DPZ should use existing agricultural preservation programs such as TDRs and the Agricultural Land Preservation program to target large land owners and encourage them to preserve and maintain the rural nature of Little East Bynum and West Branch subwatersheds. Where development may be inevitable in Rurally Impacted subwatersheds, encourage and work with developers to utilize cluster development options (CDR and COS) to preserve agricultural tracts of land. DPZ should work with the Maryland Department of Natural Resources (DNR) to establish these areas as Rural Legacy and obtain funding.

Restore Impacted Riparian Buffer by 40%

In Little East Bynum and West Branch, there are more than 30 miles of impacted riparian buffer. Existing federal and state programs such as the CREP make planting buffers in agricultural land relatively inexpensive for the County and could be taken advantage of by hiring or seeking funding to hire a person to work directly with the MD Department of Natural Resources Forestry

Division and work directly with property owners adjacent to streams in the watershed. DNR forestry already maintains a database of all the landowners with unbuffered stream segments in the Bush River watershed, so startup time would be minimal.

Focusing Resources/Specific Projects

Reduce Livestock Access in Little East Bynum

The Maryland DNR Stream Corridor Assessment Method (SCAM) revealed long stretches of stream bank erosion combined with livestock access in Little East Bynum (see Map 15). The Harford Soil Conservation District (SCD) should work with these land owners to reduce unmanaged cattle access to streams by installing exclusionary fencing, off-stream water supplies, and stabilized cattle crossing to minimize stream bank erosion and nonpoint sources pollution to streams.

Areas for Future Assessment and/or Program Development

Conduct an Operations Assessment of Farming Practices

In order to effectively reduce the nutrient contribution from Rurally Impacted subwatersheds, Harford SCD should first conduct an assessment of types of practices commonly used in farming practices. This assessment would look at practices such as nutrient management, livestock fencing, and manure storage and handling. Of particular concern is nitrate, a pollutant commonly found in groundwater and associated with agriculture. According to water quality monitoring conducted by DNR, the majority of the West Branch subwatershed has elevated concentrations of nitrate. An assessment may also help to identify the cause of the elevated pollutant concentrations in West Branch (See Map 16). The results of the assessment should be then utilized to target specific landowners and education programs to improve the current state of farming practices within the rurally impacted subwatersheds.

Septic System Education

The Harford County Health Department is currently identifying the locations of septic systems in Harford County. Once this inventory is complete, the Health Department should identify areas that have both high septic system densities and high nitrate concentrations (as identified via DNR's water quality monitoring). This may indicate a high rate of failing septic systems. The Health Department should consider implementing an inspection program for these areas or targeting them with a septic system maintenance campaign. The Septic Education Kit available from the Padilla Bay National Estuarine Research Reserve, Washington State Department of Ecology and Department of Commerce is provides excellent guidance for this types of initiative: www.ocrm.nos.noaa.gov/nerr/septickit/welcome.html.

SECTION 3.3 IMPACTED

Impacted subwatersheds have an impervious cover ranging from 11 to 25% and show clear signs of degradation due to watershed urbanization. Greater storm flows have begun to alter the stream geometry. Both erosion and channel widening are clearly evident. Stream banks become unstable, and physical habitat in the stream declines noticeably. Stream biodiversity declines to fair levels, with the most sensitive fish and aquatic insects disappearing from the stream (CWP, 1998).

Broad Recommendations

Educate 40% of the Residents on the Importance of Watershed Stewardship

The DPW should continue and expand upon existing Bush River educational programs by targeting residents in the Urban Residential Districts. Educational programs should include rooftop disconnection, preventing buffer encroachment, and lawn care. A nutrient behavior survey of the target audience should be conducted before and after the education effort to monitor success (See Appendix H for a sample nutrient behavior survey). Specific suggestions include:

- The future integrity of the riparian buffer system requires a strong education program. The goal of such a program is to make the buffer "visible" to the community. To prevent homeowner encroachment, the DPW should educate buffer owners/adjacent land owners about the benefits and uses of the buffer with pamphlets and meetings with homeowners associations.
- The DPW should build and expand on the existing rain barrel program by targeting residents living in Urban Residential Districts. Educational brochures should be created and sent to these residents. Developers should be encouraged to utilize the rooftop disconnection credit presented in the Maryland Stormwater Manual (2000).
- Lawn care education is another critical element of a watershed plan in an urban and suburban watershed because of the high proportion of lawns and the tendency of suburban landowners to overfertilize their lawns. A rough estimate of lawn acres (80% of pervious residential land use) in the Bush River watershed based on land use is over 13,000 acres or over 20 square miles (Caraco, 2001). As a result lawns represent a significant portion of the nitrogen load in the watershed and therefore the reduction in fertilizer use in the watershed via lawn care education would be a large single source of nitrogen reduction. A lawn care education program that focuses on reducing the use of fertilizers and pesticides as well as picking up after pets would be well justified and provide a considerable water quality benefit to the Bush River watershed. Mediums that should be used in the campaign include radio (via public service announcements), the newspaper, cable TV and schools. The county is already working on a video to be shown on cable TV and in the schools. See the Maryland Tributary Strategies' Non-Point Source Pollution Education Campaign for ideas: http://www.dnr.state.md.us/bay/tribstrat/nps_pollution.html.

Implement Three Stormwater Retrofits

The majority of the Bush River watershed includes stormwater practices designed under previous County stormwater criteria that did not require water quality or channel protection treatment. DPW should construct up to three stormwater retrofits within Impacted subwatersheds as a start to improve existing management of runoff from urban areas. Three of CWP's top six candidate retrofit sites are located in Impacted subwatersheds (See Map 12 and Table 12). In 1999, KCI conducted a study that also identified good retrofit opportunities in Bynum Run. For a more in-depth discussion on the CWP's retrofit inventory, see Section 2.6. To obtain buy-in from adjacent landowners, consider holding educational meetings before the retrofit design.

Focusing Resources/Specific Projects

Conduct Stream Clean-ups in Middle and Lower Bynum

According to the SCAM data, there are a high number of trash dumping sites per stream mile in Middle Bynum (BC-3) and Lower Bynum (BC-2) (See Map 22 and 23). DPW should coordinate stream clean-up activities to target these sites. Once the Bush River Watershed Association has

been established (see Watershed-wide recommendations), they should take over this function. Trash dumping is an on-going issue and stream clean-ups should go beyond the site identified by the SCAM. The County should track reported dumpings and address them as needed.

Preserve the Contiguous Forest Areas in Lower Winters Direct Drainage and Cranberry Run
After DPZ has had the opportunity to field verify the remaining contiguous forest tracts in the Sensitive subwatersheds, DPZ should field verify the contiguous forest areas identified in Lower Winters (OP-2) and Cranberry Run (CC-3) (see Map 10). These contiguous forest areas are estimated to be more than 460 and 200 acres, respectively. If the DPZ's field verification is promising, the County should work to preserve these areas.

Areas for Future Assessment and/or Program Development

Continue to Investigate and Implement Stormwater Retrofit Opportunities
The retrofit inventory conducted by CWP surveyed a small area relative to the overall drainage area of the Bush River watershed. DPW should explore other opportunities for stormwater retrofitting including:

- the Bel Air portion of the Plumtree subwatershed (OP-9) (See Map 24). Field reconnaissance and survey of aerial photographs indicated that there are several more opportunities for stormwater retrofits in this area including Bel Air High School and the Upper Chesapeake Health Center. There may be some merit in pursuing a cooperative approach to retrofitting with the Town of Bel Air.
- implementation of the feasible and visible CWP Tier 2 and Tier 3 retrofit candidate sites (See Table 12).
- partnerships with SHA and the Town of Aberdeen to look for cost share projects.

SECTION 3.4 IMPACTED SPECIAL RESOURCE

Impacted Special Resource subwatersheds have an impervious cover ranging from 11 to 25% but also have notable natural resource areas (i.e., tidal waters, contiguous forest, high quality wetlands, etc.). The objective in these subwatersheds is to maintain present status of special resource area through conservation, restoration, and stormwater retrofit opportunities. The three impacted special resource subwatersheds in Bush River are Otter Point Creek Direct Drainage (OP-1), Bush Creek Direct Drainage (BC-1), Church Creek Direct Drainage (CC-1), and Haha Branch (OP-10). Maps 17, 18, 19, and 20, respectively depict some of the valuable resources and monitoring results of these three subwatersheds.

Broad Recommendations

Preserve 75% of large wetland tracts
The Impacted Special Resource subwatersheds are unique in that they contain large expanses of tidally-influenced wetlands. Field verification revealed that these wetlands have significant habitat and water quality value. Unfortunately all of the wetlands are within the development envelope and may be subject to future development impacts. The DPZ and Harford Land Trust should work together to protect these valuable natural resources and maintain their current status. Several avenues can be pursued to ensure their protection. To preserve the wetlands, conservation easements and land acquisition can be pursued. The County should also work to ensure that development does not occur within 75 feet of these wetlands.

Implement Three Stormwater Retrofits

The majority of the Bush River watershed includes stormwater practices designed under previous County stormwater criteria that did not require water quality or channel protection treatment. DPW should construct up to three stormwater retrofits within Impacted Special Resource subwatersheds to improve existing management of runoff from urban areas. Three of CWP's top six candidate retrofit sites are located in Impacted Special Resource subwatersheds (See Map 12 and Table 12). To obtain buy-in from adjacent landowners, consider holding educational meetings before the retrofit design. For a more in-depth discussion on the CWP's retrofit inventory, see Section 2.6.

Focusing Resources/Specific Projects

Conduct Streambank Stabilization in Haha Branch and Otter Point Creek DD

During in-office analyses, Haha Branch did not appear to be a subwatershed to warrant special attention. However, based on the CWP field verification, Haha Branch has a high environmental significance to due to its contiguous forest stand (based on GIS mapping) and because it serves as a transitional area to between upland forest and tidal wetland areas.

Given its importance, CWP has identified several areas that would warrant streambank stabilization in combination with upstream stormwater retrofit sites (see Map 21). The primary goal of the retrofits would be to reduce flashy flows associated with uncontrolled stormwater runoff. The streams in the two subwatersheds are characterized by highly erosive bed and bank materials, consisting largely of sand and gravel. These materials have eroded easily when impacted by changed hydrology due to urbanization. During fieldwork in the watershed, the streams in Haha and Otter Point exhibited the most instability and sediment transport of the subwatersheds evaluated. To obtain buy-in from adjacent landowners, consider holding educational meetings before the stabilization design. Table 17 lists the stabilization priorities in order of severity as well as the length of stream reach and associated retrofits.

Table 17. Stream Stabilization Priorities in Haha Branch and Otter Point Creek DD

ID	Description	Approx. Stream Length[1]	Associated Tier 1 or 2 Stormwater Retrofit
SS-1	This site is located on an unidentified stream drainage[2] downstream of the Edgewood Food Lion and Post Office. The reach runs parallel to Hanson Rd. The SS1 reach is characterized by steep eroding banks and evidence of considerable sediment transport and highly mobile (sand and gravel) substrate materials.	1200 ft including side channels	OP-4
SS-2	Site SS2 is located in the Otter Point Creek subwatershed parallel to Cedar Drive South near Edgewood Elementary school. The reach is characterized by headcut migration, steep eroding banks and highly mobile substrate materials.	1200 ft	OP-1 OP-2 OP-2a
SS-3	Site SS3 is located in Haha Branch downstream of a portion of Philadelphia Station, a 10-15 year old neighborhood in Abingdon. The particular stream reach receives untreated runoff from Abingdon Rd and runoff from a dry pond that is a priority retrofit location in Philadelphia Station. The reach is characterized by headcut migration, steep eroding banks and highly mobile substrate materials.	1000 ft	HH-5 HH-5A
SS-4	Site SS4 is located in a residential development called Box Hill South downstream of Windy Laurel Way and parallel to Deer Creek Drive. The reach exhibited evidence of steep eroding banks and considerable sediment transport due to uncontrolled stormwater runoff. Stream bed and stream bank substrates are highly erodible and mobile.	500 ft	HH-4
SS-5	Site SS5 is located adjacent to an apartment community called Woodsdale off 924. The stream reach is characterized by eroding banks, sediment transport and	1600 ft	HH-2A

Table 17. Stream Stabilization Priorities in Haha Branch and Otter Point Creek DD			
ID	**Description**	**Approx. Stream Length[1]**	**Associated Tier 1 or 2 Stormwater Retrofit**
	instability. Outfalls from the development have destabilized and eroded the associated channels.		
SS-6	Site SS6 is located in an area where new development is currently occurring near Lou-Mar Drive and Sedberry Lane off of Abingdon Rd. The stream shows signs of instability, erosion and sediment transport that is likely to become more severe as increased stormwater from new development enters this stream reach.	330 ft	None - New development will likely contain stormwater practices
1: Determined from field verification and GIS mapping 2: Stream does not show on GIS hydrology layer			

Preserve the Contiguous Forest Area in Haha Branch
After DPZ has had the opportunity to field verify the remaining contiguous forest tracts in the Sensitive subwatersheds, DPZ should field verify the contiguous forest area identified in Haha Branch (see Map 10). This contiguous forest area is estimated to be more than 430 acres. If the DPZ's field verification is promising, the County should work to preserve this area.

Areas for Future Assessment and/or Program Development
Develop a Heightened Plan Review in Impacted Special Resource Subwatersheds
CWP's field verification combined with the SCAM data has indicated a high number of severely eroded streambanks in these subwatersheds. DPZ should consider implementing a heightened plan review of these subwatersheds due to a potentially high rate of substrate erodibility. Place an emphasis on environmentally sensitive development either through better site design or low impact development techniques because they strive to replicate pre-disturbance hydrology.

SECTION 3.5 WATERSHED-WIDE

Establish a Bush River WAMP Implementation Committee
To ensure the implementation of the Bush River WAMP, DPW should establish an Implementation Committee. The purpose of the committee would be to coordinate implementation efforts between agencies and organizations, secure funding for implementation efforts, and track the success of the implementation (See Section 5.0). The Implementation should include representatives from DPZ, DPW, County Health Department, Forest Service, Harford SCD, Harford Land Trust, DNR and other key watershed stakeholders. DPW should take the lead to organizing the committee as the first order of business in implementing the plan.

Foster the development of a watershed group for the Bush River
The DPW, with strong landowners/stakeholders support should foster the development of a Bush River watershed organization. Stakeholders have expressed interest in the participating in a watershed group, organized stream clean-ups and tree plantings (see Section 2.8 on Stakeholder Involvement). This organization can facilitate community-based stewardship of the Bush River watershed. Eventually, this group could organize tree plantings, stream cleanups, environmental education programs, and recreational activities.

Create a website to encourage watershed stewardship
DPW should provide a central location for citizens to access information about their watersheds and streams. The website should provide information on watershed basics (i.e., what is a

watershed), locator watershed maps (i.e., what watershed do you live in?), promote practices that citizens can do on an everyday basis to become better watershed stewards, and provide information on how to volunteer or become involved. For an example of such a website, visit James City County's PRIDE website: www.protectedwithpride.org See Appendix I for CWP's "Top Ten Things You Can Do to Protect Your Watershed."

Implement Recommendations of the Harford County Site Planning Roundtable

As of March, 2003, the Harford County Site Planning Roundtable is still underway. Once recommendations are complete, in May, 2003, the DPW and DPZ should work to incorporate these recommendations into their codes. The final product of the Roundtable will include specific recommendations for code and ordinance revisions that would allow flexibility in site design by encouraging minimization of impervious cover, protecting natural areas, integrating stormwater management, and maintaining product marketability. Some highlights of the draft recommendations include:

- Removal of Natural Resource District from private lots with some flexibility in lot geometry
- Creation of a Traditional Neighborhood District option
- Require a conceptual design meeting with plan reviewers/DPW/and designers early in process
- Require landscaped islands for large cul-de-sacs
- Establish maximum parking ratio with provisions for pervious materials
- Reduce parking requirements for areas of mass transit and shared or joint parking
- Increase landscape requirements for parking lots
- Encourage development of a landscaping ordinance
- Adopt a native plants list for the County

Establish an Adopt-A-Pond Program

All stormwater ponds should have a maintenance plan in place. By engaging Homeowner Associations and other volunteers in the beautification and maintenance of their stormwater ponds, they are also helping to keep the embankments stable and improve or maintain the current pollutant removal capability. Other amenities that a properly designed and maintained pond may have are increased wildlife habitat, recreation areas, and aesthetic vistas. The County should develop an Adopt-a-Pond program that would work with Homeowner Associations and other interested individuals and volunteers to conduct basic maintenance for their stormwater ponds. This would include basic inspections (i.e., are trees on the embankment or is there significant damage to the riser), trash pick up, mowing, and aquatic vegetation plantings. Hillsborough County, FL is a great example of a successful Adopt-a-Pond program. Materials and information on their program can be obtained by visiting the website: http://www.hillsboroughcounty.org/publicworks/engineering/stormwtr.html

Improve ESC Implementation, Inspection and Enforcement

Keeping soil on the land with erosion and sediment control (ESC) is an extremely important best management practice in the Bush River watershed because of the current and expected growth within the watershed. Currently over 550 construction permits are active in Harford County for an estimated 2250 acres of development based on fiscal year 2001 and 2002 data (MDE, 2003). As the Bush River watershed makes up a significant portion of the development envelope in Harford County, development is expected to continue at a rapid rate. An effective sediment and erosion control program is a vital part of protection and sediment reduction in the Bush River watershed. Data received from the Maryland Department of the Environment (MDE) indicates

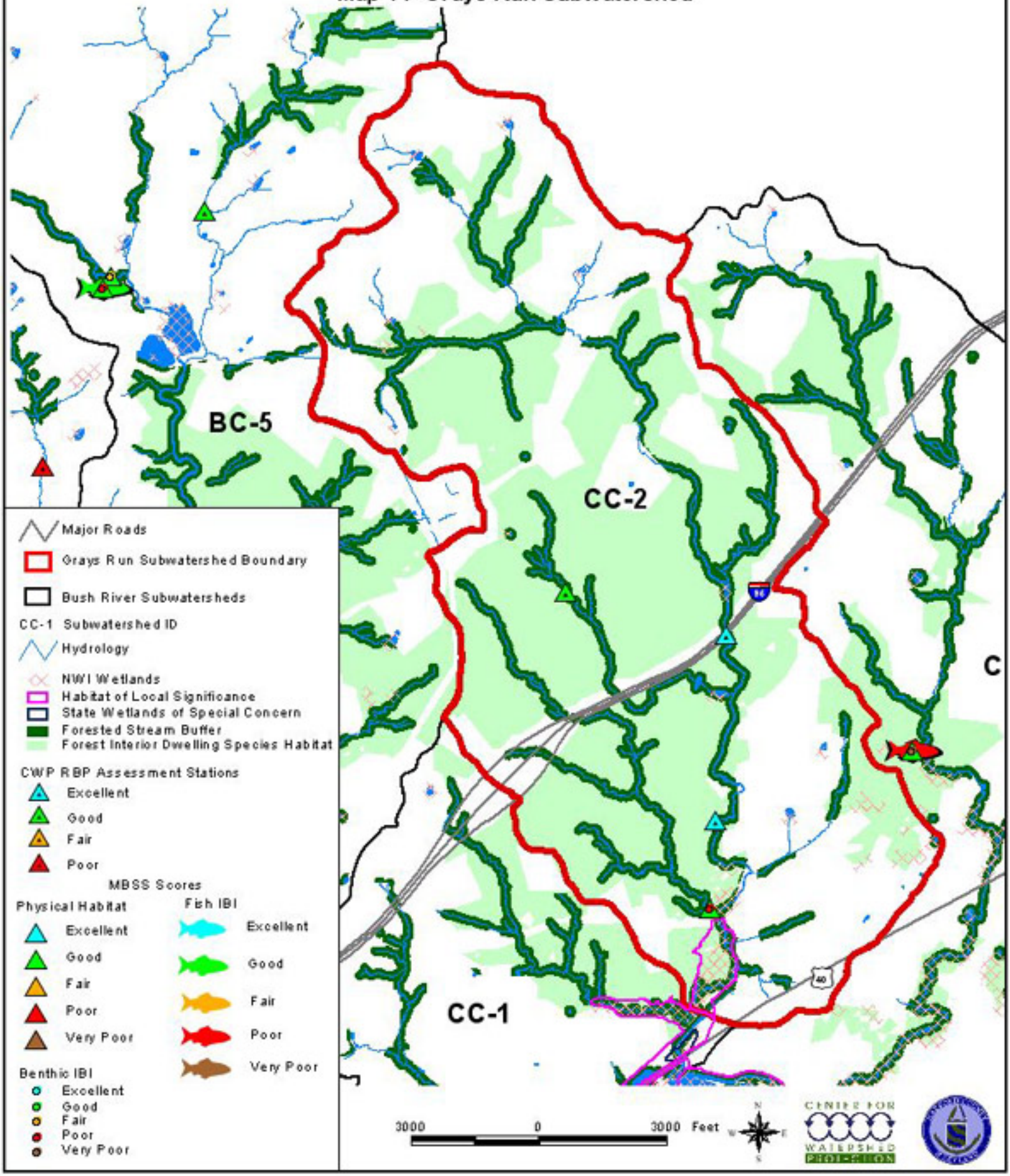
that implementation and maintenance of erosion and sediment controls could be improved in the Bush River watershed. In the 2002 ESC Program review completed by MDE, 18 of 33 sites had inadequate implementation on at least one occasion and 9 of 33 sites were said to have unsuccessful enforcement overall. Also of concern is the fact that for 565 sites inspected by the county, 2943 violations were written (an average over 5 per site) suggesting that sites are routinely out of compliance and yet no fines were levied and stop work orders were only issued 56 times. The review did conclude that Harford County demonstrated an ability to enforce ESC requirements and that for the most part during the review when sites were re-inspected that compliance improved. Further improvement in implementation and enforcement has the potential to reduce sediment transport considerably in the watershed. A benchmark should be set that fewer than 10% of sites should be out of compliance during MDE's program review and that proper installation and maintenance of ESC practices becomes routine in Harford County.

Table 18. Summary of Bush River Watershed Management Recommendations

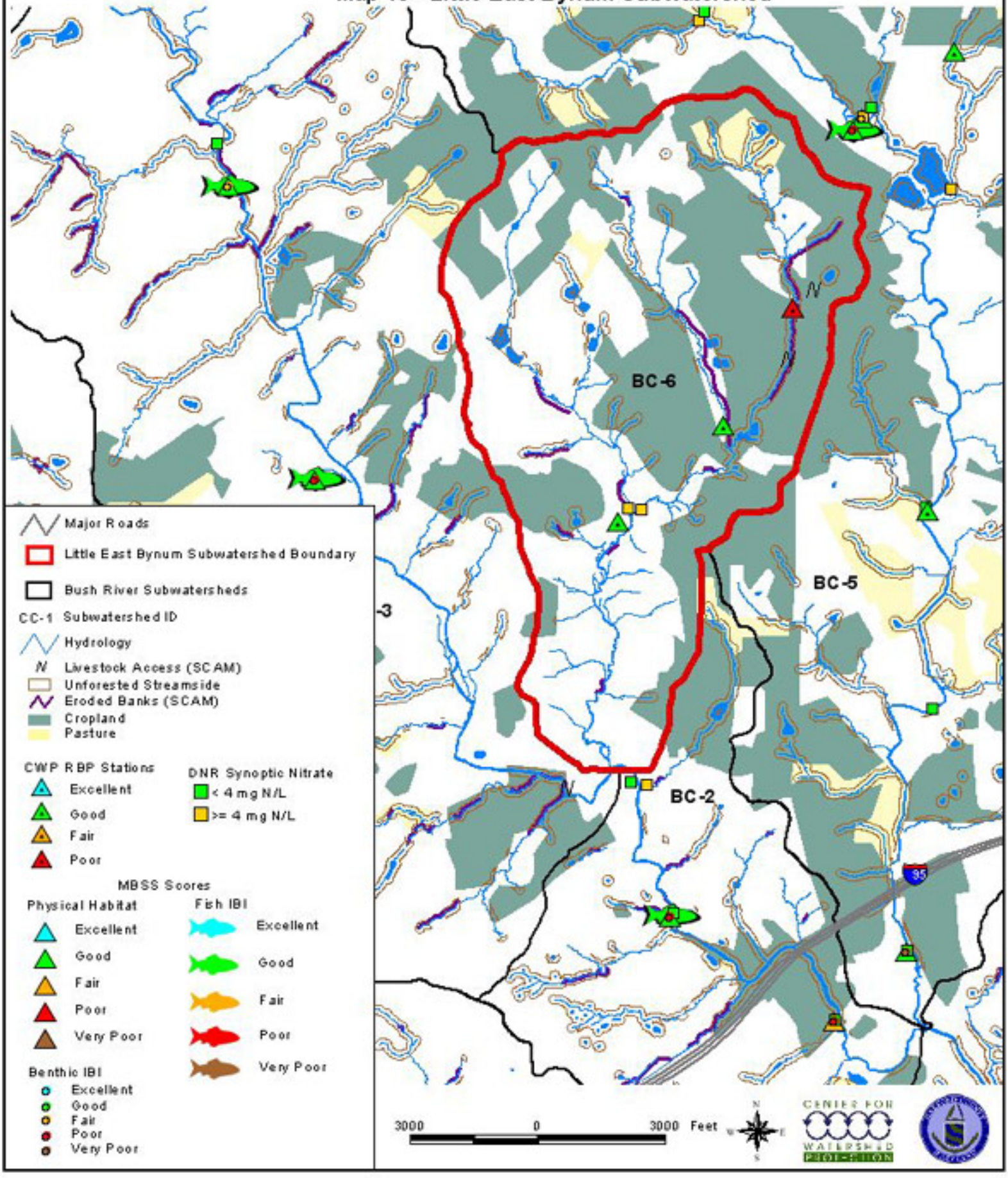
Subwatershed Management Category	Recommendation	Responsible Party
Sensitive	Preserve Contiguous Forests in all Sensitive Subwatersheds	DPZ & Harford Land Trust
Sensitive	Enhance Existing Riparian Buffer in all Sensitive Subwatersheds	DPW, Forest Service, Harford SCD
Sensitive	Grays Run Contiguous Forest Preservation	DPZ & Harford Land Trust
Sensitive	Grays Run Stream Buffer Enhancement	DPW, Forest Service, Harford SCD
Sensitive	Maintain Grays Run Sensitive Status	DPZ
Sensitive	Field Verify and Prioritize Contiguous Forest Areas for Preservation	DPZ
Rurally Impacted	Preserve Farmlands in Rurally Impacted Subwatersheds	DPZ & DNR
Rurally Impacted	Restore Riparian Buffer in Rurally Impacted Subwatersheds	DPW, Forest Service, Harford SCD
Rurally Impacted	Reduce Livestock Access in Little East Bynum	Harford SCD
Rurally Impacted	Agricultural Practices Assessment in Rurally Impacted Subwatersheds	Harford SCD & DPW
Rurally Impacted	Septic System Education in Rurally Impacted Subwatersheds	Health Department
Impacted	Educate Residents on Watershed Stewardship in Impacted Subwatersheds	DPW
Impacted	Implement Stormwater Retrofits in Impacted Subwatersheds	DPW
Impacted	Conduct Stream Clean-ups in Lower and Middle Bynum	DPW
Impacted	Preserve Contiguous Forest in Lower Winters DD and Cranberry Run	DPZ & Harford Land Trust
Impacted	Investigate Other Stormwater Retrofit Opportunities in Impacted Subwatersheds	DPW
Impacted Special Resource	Preserve Large Wetland Tracts in Impacted Special Resource Subwatersheds	DPZ & Harford Land Trust
Impacted Special Resource	Implement Stormwater Retrofits in Impacted Special Resource Subwatersheds	DPW
Impacted Special Resource	Streambank Stabilization in Haha and Otter Point Subwatersheds	DPW
Impacted Special Resource	Develop a Heightened Plan Review in Impacted Special Resource Subwatersheds	DPZ

Table 18. Summary of Bush River Watershed Management Recommendations		
Subwatershed Management Category	**Recommendation**	**Responsible Party**
Watershed-Wide	Establish an Implementation Committee	All Responsible Parties plus key stakeholders
Watershed-Wide	Foster the Development of Bush River Watershed Association	DPW/Stakeholders
Watershed-Wide	Create Watershed Stewardship Website	DPW
Watershed-Wide	Implement Recommendations of Harford County Site Planning Roundtable	DPZ & DPW
Watershed-Wide	Establish an Adopt-a-Pond Program	DPW
Watershed-Wide	Improve ESC Implementation, Inspection and Enforcement	DPW

Map 14- Grays Run Subwatershed



Map 15 - Little East Bynum Subwatershed



Map 16 - West Branch Subwatershed